



## Adjacency or Identification Concerns

This PNVG is distinguished from other longleaf pine-dominated types by the presence of wetland herbs and shrubs. It includes the wet pine flatwoods of the Carolinas but not the flatwoods containing saw palmetto (*Serenoa repens*) of the Gulf Coast region. It is abundant on remaining natural lands in the outer and middle coastal plain, and occurs in small patches in the fall line sandhills region.

Uncharacteristic vegetation types include even-aged canopy stands in which age structure has been homogenized by logging or clearing. Examples include where loblolly pine (*Pinus taeda*) or slash pine (*Pinus elliottii*) have replaced some or all of the longleaf pine, where shrubs have become dense due to inadequate burning, and where the grass-dominated ground cover has been lost due to soil disturbance or past canopy closure.

## Scale Description

Sources of Scale Data  Literature  Local Data  Expert Estimate

Disturbances other than fire typically occur on a small scale and impact patches, most ¼ acre or less in size.

## Issues/Problems

Carl Nordman made some modifications to original model developed by Michael Schafale.

## Model Evolution and Comments

Suggested reviewers - Cecil Frost, Margit Bucher  
Historical fire size figures from Cecil Frost (pers.comm, 2005)

## Succession Classes

Succession classes are the equivalent of "Vegetation Fuel Classes" as defined in the Interagency FRCC Guidebook ([www.frcc.gov](http://www.frcc.gov)).

### Class A 18%

Early1 All Structures

#### Description

Class A is characterized by canopy gaps, most a single tree to a quarter acre size, with pine regeneration up to 15 years old, or lacking pine regeneration because no mast production has occurred since the gap opened. The native grassy ground cover is dominated by *Aristida stricta*. Tree cover ranges between 0 to 50%.

#### Indicator Species\* and Canopy Position

ARST5 Lower

#### Upper Layer Lifeform

- Herbaceous  
 Shrub

Tree

Fuel Model 2

#### Structure Data (for upper layer lifeform)

	Min	Max
Cover	0 %	100 %
Height	Tree Regen <5m	Tree Regen <5m
Tree Size Class	Seedling <4.5ft	

Upper layer lifeform differs from dominant lifeform. Height and cover of dominant lifeform are:

The dominant lifeform is the herbaceous component. Canopy closure ranges between 25-100% and is composed of medium height herbs, 0.5-0.9m tall.

\*Dominant and Indicator Species are from the NRCS PLANTS database. To check a species code, please visit <http://plants.usda.gov>.

**Class B 3%**

Mid1 Closed

**Description**

Class B includes patches, mostly ¼ acre or less in size, with canopy pines 15-75 years old, and a substantial component of mid-story hardwoods or shrubs encroaching in the absence of fire. The hardwood/shrub cover is greater than 50%. Canopy pine cover ranges between 25-75%.

**Indicator Species\* and Canopy Position**

ILGL Low-Mid  
PIPA2 Upper

**Upper Layer Lifeform**

- Herbaceous  
 Shrub  
 Tree

**Fuel Model 7****Structure Data (for upper layer lifeform)**

	Min	Max
Cover	75 %	100 %
Height	Tree Regen <5m	Tree Medium 10-24m
Tree Size Class	Pole 5-9" DBH	

- Upper layer lifeform differs from dominant lifeform. Height and cover of dominant lifeform are:

**Class C 45%**

Mid1 Open

**Description**

Class C includes patches, most ¼ acre or less in size, with canopy pines 15-75 years old. There are few hardwoods and only sparse shrubs due to frequent fire. The ground cover is dominated by *Aristida stricta*. Canopy pine cover ranges between 25-75%.

**Indicator Species\* and Canopy Position**

ARST5 Lower  
PIPA2 Upper

**Upper Layer Lifeform**

- Herbaceous  
 Shrub  
 Tree

**Fuel Model 2****Structure Data (for upper layer lifeform)**

	Min	Max
Cover	0 %	75 %
Height	Tree Regen <5m	Tree Medium 10-24m
Tree Size Class	Pole 5-9" DBH	

- Upper layer lifeform differs from dominant lifeform. Height and cover of dominant lifeform are:

The dominant lifeform is the herbaceous component. Canopy closure ranges between 25-100% and is composed of medium height herbs, 0.5-0.9m tall.

**Class D 33%**

Late1 Open

**Description**

Class D is characterized by patches, most ¼ acre or less in size, with canopy pines 75 or more years old. There are few hardwoods and only sparse shrubs due to frequent fire. The ground cover is dominated by *Aristida stricta*. Canopy pine cover ranges between 25-75%.

**Indicator Species\* and Canopy Position**

ARST5 Lower  
PIPA2 Upper

**Upper Layer Lifeform**

- Herbaceous  
 Shrub  
 Tree

**Fuel Model 2****Structure Data (for upper layer lifeform)**

	Min	Max
Cover	0 %	75 %
Height	Tree Medium 10-24m	Tree Tall 25-49m
Tree Size Class	Medium 9-21" DBH	

- Upper layer lifeform differs from dominant lifeform. Height and cover of dominant lifeform are:

The dominant lifeform is the herbaceous component. Canopy closure ranges between 25-100% and is composed of medium height herbs, 0.5-0.9m tall.

**Class E** 1%

Late I Closed

**Description**

Class E includes patches with canopy pines 75 or more years old, with a substantial component of hardwoods and/or shrubs in either the overstory or understory. The ground cover is shrubby or sparse. The hardwood/shrub cover is greater than 50%.

**Indicator Species\* and Canopy Position**

ILGL Low-Mid  
PIPA2 Upper

**Structure Data (for upper layer lifeform)**

	Min	Max
Cover	0 %	75 %
Height	Tree Medium 10-24m	Tree Tall 25-49m
Tree Size Class	Medium 9-21"DBH	

**Upper Layer Lifeform**

- Herbaceous
- Shrub
- Tree

Upper layer lifeform differs from dominant lifeform. Height and cover of dominant lifeform are:

**Fuel Model** 7

**Disturbances**

**Non-Fire Disturbances Modeled**

- Insects/Disease
- Wind/Weather/Stress
- Native Grazing
- Competition
- Other:
- Other:

**Fire Regime Group:** 1

- I: 0-35 year frequency, low and mixed severity
- II: 0-35 year frequency, replacement severity
- III: 35-200 year frequency, low and mixed severity
- IV: 35-200 year frequency, replacement severity
- V: 200+ year frequency, replacement severity

**Fire Intervals (FI):**

Fire interval is expressed in years for each fire severity class and for all types of fire combined (All Fires). Average FI is the central tendency modeled. Minimum and maximum show the relative range of fire intervals, if known. Probability is the inverse of fire interval in years and is used in reference condition modeling. Percent of all fires is the percent of all fires in that severity class. All values are estimates and not precise.

**Historical Fire Size (acres)**

Avg: 100000  
Min: 50  
Max: 1000000

**Sources of Fire Regime Data**

- Literature
- Local Data
- Expert Estimate

	Avg FI	Min FI	Max FI	Probability	Percent of All Fires
Replacement	100			0.01	4
Mixed	175			0.00571	2
Surface	4			0.25	94
All Fires	4			0.26571	

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